

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Re: Application of: **Clemens SCHWAB**
Serial No.: 10/578,461 Confirmation No.: 2110
Filed: May 8, 2006
For: **FUEL CELL SYSTEM WHICH CAN BE USED IN A
MOBILE MANNER WITH AN ADSORPTION
ACCUMULATOR**
Art Unit: 1795
Examiner: Karie Amber O'NEILL
Customer No.: 23280
Atty. Docket: 510.1157

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

January 6, 2010

APPELLANT'S REPLY BRIEF UNDER 37 C.F.R. §41.41

Sir:

Appellants submit this Reply Brief for consideration of the Board of Patent Appeals and Interferences (the "Board") in response to the Examiner's Answer dated November 6, 2009 and in support of their appeal of the Final Office Action that was issued on March 23, 2009. Appellants respectfully reassert each of the arguments asserted in Appellants' Brief dated August 5, 2009 and provides herein only additional comments in response to the arguments raised in the Examiner's Answer.

No fee is believed required. If any fee is required at this time, the Commissioner is authorized to charge payment of the same to Deposit Account No. 50-0552.

ARGUMENTS

Claim 5

Honda et al. in no way discloses the requirement of claim 5 of “an adsorption accumulator assigned to the fuel cell unit and forming a heat store adapted to release heat when adsorbing the fuel cell waste products.” The heat exchange fluid flowing through heat exchange part 25, heat exchange part 51 and fluid circuit A is in no way “fuel cell waste products” as required by claim 5 and the Examiner provides absolutely no real support for her assertion that the heat exchange fluid includes fuel cell waste products. The Examiner attempts to overcome this deficiency of Honda et al. by alleging that:

Honda et al. clearly indicates in Drawings 1 and 2, as well as in paragraph 0009-0012, the adsorber 5 comprises heat exchange part 51, where heat exchange fluids flow, and a plurality of granular adsorbents 52 which adsorb an adsorptive medium (for example water) by being cooled and desorb the adsorptive medium by being heated. The water, or adsorptive medium, is a waste product of the fuel cell unit 2 and flows from the fuel cell discharge portion to the adsorber 5 through fluid circuit A. (Examiner's Answer, page 8, lines 17 to 22).

It is respectfully submitted that the Examiner is completely misconstruing paragraph 0012 of Honda et al. It is clear from paragraph 0012 and Fig. 1 of Honda et al., that the water (i.e., adsorptive medium) that is absorbed by granular adsorbents 52 comes from within sealed container 60 through valve 43. Because container 60 is sealed, the water in container 60 clearly is not a waste product of fuel cell 2.

In any event, it is clear from paragraph 0019 that the water absorbed by granular adsorbents 52 never actually enters into heat exchange part 51, but merely causes granular adsorbents 52 to heat the heat exchange fluid flowing through heat exchange part 25, heat exchange part 51 and fluid circuit A. Thus, contrary to the Examiner's assertion, no part of fluid circuit A could be “a first line connected to the fuel cell unit discharging the fuel cell waste products from the fuel cell unit” or “a second line connecting the first line to the adsorption accumulator for feeding the fuel cell waste products to the adsorption accumulator” as required by claim 1. Only heat exchange fluid flows through fluid circuit A, not the water absorbed by granular adsorbents 52, and especially not waste products of fuel cell 2.

Furthermore, fluid circuit A cannot be both the "cooling circuit" of claim 5 and the "first line" and the "second line" of claim 5. The Examiner's assertion that claim 5 "does not specifically state that the 'cooling circuit' does not and cannot include the 'first line' and 'second line'" is contrary to the basic rules of claim interpretation and the plain language of claim 5. The structure of claim 5 clearly lists the "cooling circuit," the "first line" and the "second line" as separate elements and any contrary interpretation is unreasonable.

Based on the foregoing and the arguments asserted in Appellants' Brief dated May 5, 2008 and the Reply Brief dated January 13, 2009, reversal of the rejection under 35 U.S.C. 102(b) of claims 11 and 24 is respectfully requested.

Claim 12: Argued Separately

Honda et al. does not disclose the "actuator" as recited in claim 12. The three-way-type selector valve 41, which the Examiner alleges corresponds to the "actuator" of claim 12, is a part of hydraulic circuit A of Honda et al. and passes heat exchange fluid flowing, not fuel cell waste products. Furthermore, as similarly discussed above, claim 12 clearly requires that the "actuator" is distinct from the claimed "cooling circuit" and any contrary interpretation is unreasonable.

Claim 13: Argued Separately

Honda et al. does not disclose the "second actuator" required by claim 13. The three-way-type selector valve 42, which the Examiner alleges corresponds to the "second actuator" of claim 13, is adapted to pass heat exchanging fluid from heat exchanging part 51, which the Examiner alleges corresponds to the claimed "heat exchanger," to fuel cell 2. As shown by the arrow between valve 42 and heat exchanging part 51 in Fig. 1 of Honda et al., valve 42 is not adapted to pass any fluid from fuel cell 2 to heat exchanging part 51 and thus is not arranged within the claimed system as required by claim 13.

Claim 7: Argued Separately

Honda et al. does not disclose the step of claim 7 of "when the fuel cell system is starting up, heating coolant in the cooling circuit via the heat exchanger using heat stored in the adsorption accumulator, with the fuel cell waste products being fed to the adsorption accumulator at the same time, the fuel cell waste products including waste gas." Honda et al. does not

disclose feeding any waste products from fuel cell 2 to adsorber 5. As discussed above with respect to the corresponding apparatus claim, water in sealed container 60 of Honda et al. is used to heat the heat exchanging fluid in heat exchange part 51, not waste products of fuel cell 2.

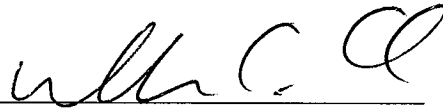
CONCLUSION

It is respectfully submitted that the application is in condition for allowance. Favorable consideration of this Reply Brief is respectfully requested.

Respectfully submitted,

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